CLAIMS:

1.   Camera for recording pictures comprising an image sensor for receiving a
picture, a processing unit for processing the picture and an end processing unit, characterized
in that the camera comprises a light modulation removal means between the processing unit
and the end processing unit for removing light modulation between different fields of the
picture.

2.   Camera as claimed in claim1, characterized in that the light modulation
removal means comprise adaptive fading means for fading between one field and at least n
fields, whereby n is the repetition pattern of light modulation.

3.   Camera as claimed in claim 2, characterized in that the light modulation
removal means comprise means to calculate the lowest common multiple of the repetition
period of said illumination variation and the repetition period of said picture, which lowest
common multiple is used as common period to average consecutive images of said picture
during recording.

4.   Camera as claimed in claim 3, characterized in that the light modulation
removal means comprise a motion detector and means to decrease the averaging of
consecutive images when motion is detected, which motion detector comprises evaluation
means to evaluate the local difference between images having a field difference of n.

5.   Camera as claimed in claim 3, characterized in that the light modulation
removal means comprises means to estimate the modulation strength on a locality of the
image, and reducing means to reduce the averaging on localities where the light modulation
is weak.

6.   Camera as claimed in claim 3, characterized in that the light modulation means
comprises means to reduce the averaging on localities where the luminance component of
said picture is low.

7.   Camera as claimed in claim 3, characterized in that means to exclude high spatial frequency components of the picture from the averaging step.

8.   Camera as claimed in claim 3, characterized in that the light modulation removal means comprise means to correct consecutive images to the same temporal position using motion compensated conversion techniques prior to the averaging.

9.   Camera as claimed in claim1, characterized in that the light modulation removal means comprise de-interlacing means to generated information fro any missing position in the original interlaced image, using two images with different interlace phases and equal light modulation phases.

10.   Light modulation removal means for use in a camera system according to claim 1.

11.   Method of removing light modulation during recording pictures with an image sensor having the step of receiving the picture, processing the picture, removing the light modulation by storing different field of the picture and averaging the different fields in dependence of motion, and/or locations with low respectively high luminance locations.